Abstract ID: 7

Title: DO SEA LIONS SEEK OUT DOLPHINS TO ENHANCE FORAGING

SUCCESS?

Category: Ecology

Student: Doctoral

Preferred Format: Oral Presentation

Abstract: Aggregations by three species of dolphins (the bottlenose dolphin, Tursiops truncatus, the short-beaked common dolphin, Delphinus delphis, and the long-beaked common dolphin, Delphinus capensis) and California sea lions (Zalophus californianus) were investigated in Santa Monica Bay, California. Over 200 surveys conducted during 1997-2001 documented that California sea lions were seen with 37.3 % of the sightings aggregated with bottlenose dolphins (n bottlenose dolphin sightings = 150) and 71.4 % of the sightings aggregated with the two species of common dolphins (n common dolphin sightings = 98). Aggregations of bottlenose dolphins and sea lions were seen both in inshore and offshore waters, whereas common dolphins and sea lions were observed only in offshore waters. These aggregations were often recorded surface-feeding near escarpments and submarine canyons, showing a striking preference for these bathymetric features versus flat areas, plateau and inshore waters of the continental shelf (< 500 m from shore; chi square = 27.961, DF = 5, P < 0.001). Observations for Santa Monica Bay show that 1) sea lions initiate aggregation and departure from dolphin schools, 2) sea lions imitate dolphin behavior, and 3) no aggressive behavior between sea lions and dolphins was ever recorded. I argue that sea lions may take advantage of the superior food-locating abilities of dolphins. This study provides the first detailed description of mixed-species aggregations and habitat usage by three dolphin species and sea lions.